This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Original) A method for treating a patient having a condition mediated by neurotoxicity, neurodegeneration or neurological damage, comprising administering to said patient a therapeutically effective amount of a peptide comprising one or more monomeric peptides of 8 to about 40 amino acids in length that bind to EPO receptor, each monomeric peptide comprising a sequence of amino acids $X_4X_5X_aX_bX_6X_cX_dX_7$ (SEQ ID NO: 47), wherein

   $X_a$ is G or A;

   $X_b$ is P or A;

   $X_c$ is T or A;

   $X_d$ is selected from W, A, and F;

   $X_4$ is selected from R, H, Y, L, and W, or $X_4$ is nonexistent;

   $X_5$ is selected from F, M, and I;

   $X_6$ is independently selected from the 20 genetically coded L-amino acids or the stereoisomeric D-amino acids; and

   $X_7$ is selected from D, V, E, I, and L.

2. (Original) The method of claim 1, wherein said sequence is $X_4\ X_5GPX_6TWX_7$ (SEQ ID NO: 48).

3. (Original) The method of claim 2, wherein said sequence is $X_3X_4\ X_5GPX_6TWX_7X_8$ (SEQ ID NO: 1), wherein

   $X_3$ is selected from C, E, A, α-amino-γ-bromobutyric acid, and homocysteine (Hoc); and,

$X_8$ is selected from C, K, A, α-amino-γ-bromobutyric acid, and homocysteine (Hoc).

4. (Original) The method of claim 3 with the proviso that either $X_3$ or $X_8$ is C or homocysteine (Hoc).

5. (Original) The method of claim 4 wherein $X_3$ or $X_8$ is C.

6. (Original) The method of claim 3 wherein

$X_3$ is selected from C, E, and A;

$X_4$ is selected from R, H, and Y, or $X_4$ is nonexistent;

$X_6$ is selected from V, L, I, M, E, and A; and

$X_7$ is D or V; and

$X_8$ is selected from C, K and A.

7. (Original) The method of claim 3 wherein said peptide is a dimer of each of said monomeric peptides comprising a sequence of amino acids $YX_2X_3X_4X_5GPX_6TWX_7X_8$ (SEQ ID NO: 2), wherein

$X_2$ and $X_6$ are each independently selected from the 20 genetically coded L-amino acids;

$X_3$ is C; and

$X_8$ is C.

8. (Original) The method of claim 7 wherein

$X_2$ is selected from L S H M A and I, or $X_2$ is nonexistent; and

$X_6$ is selected from V, L, I, M, E, and A.

9. (Currently amended) The method of claim 7 wherein each of said monomeric peptides in said peptide dimer comprises a sequence of amino acids $X_1YX_2X_3X_4X_5GPX_6TWX_7X_8X_9X_{10}X_{11}$ (SEQ ID NO: 3), wherein each of $X_1$, $X_2$, $X_6$, $X_9$, $X_{10}$, and $X_{11}$ is independently selected from the 20 genetically coded L-amino acids.

10. (Currently amended) The method of ~~peptide dimer~~ of claim 9 wherein, in the peptide dimer,

$X_3$ is selected from C, E, and A;

$X_4$ is selected from R, H, and Y, or $X_4$ is nonexistent;

$X_7$ is D or V;

$X_8$ is C or K.

$X_9$ is K, G, L, Q, R, S, or T; and

$X_{10}$ is A, G, P, R, or Y.

11. (Original) The method of Claim 10 wherein

$X_1$ is D, E, L, N, S, T or V;

$X_2$ is selected from L, S, H, M, A, and I, or $X_2$ is nonexistent;

$X_9$ is selected from K, Q, R, S, and G; and

$X_{10}$ is selected from P, Y, and A.

12. (Original) The method of claim 3 wherein said peptide is a dimer of each of said monomeric peptides comprising a sequence of amino acids $X'X_2X_3X_4X_5GPX_6TWX_7X_8$ (SEQ ID NO: 49), wherein X' is selected from D-Tyr, *p*-$NO_2$-Phe, *p*-$NH_2$-Phe, *p*-F-Phe, *p*-I-Phe, and 3,5-dibromo-Tyr.

13. (Original) The method of claim 12 wherein said sequence is X'CHFGPLTWVC.

14. (Original) The method of claim 1 wherein each of said monomeric peptides comprise a sequence independently selected from

| | |
|---|---|
| GGLYLCRFGPVTWDCGYKGG | (SEQ ID NO:7); |
| GGTYSCHFGPLTWVCKPQGG | (aka EMP-1) (SEQ ID NO:8); |
| GGDYHCRMGPLTWVCKPLGG | (SEQ ID NO:9); |
| VGNYMCHFGPITWVCRPGGG | (SEQ ID NO:10); |
| GGVYACRMGPITWVCSPLGG | (SEQ ID NO:11); |
| VGNYMAHMGPITWVCRPGG | (SEQ ID NO:12); |
| GGTYSCHFGPLTWVCKPQ | (aka EMP-16) (SEQ ID NO:13); |
| GGLYACHMGPMTWVCQPLRG | (aka EMP-36) (SEQ ID NO:14); |
| TIAQYICYMGPETWECRPSPKA | (aka EMP-38) (SEQ ID NO:15); |
| YSCHFGPLTWVCK | (aka EMP-20 (SEQ ID NO:16); |
| YCHFGPLTWVC | (aka EMP-23) (SEQ ID NO:17); |
| SCHFGPLTWVCK | (aka EMP-24) (SEQ ID NO:18); |
| GGTASCHFGPLTWVCKPQGG | (aka EMP-6) (SEQ ID NO:19); |
| GGTYSCHFAPLTWVCKPQGG | (aka EMP-9) (SEQ ID NO:20); |
| GGTYSCFGPLTWVCKPQGG | (aka EMP-27) (SEQ ID NO:21); |
| TYSCHFGPLTWVCKPQGG | (aka EMP-17) (SEQ ID NO:22); |

TYSCHFGPLTWVCKPQ (aka EMP-18) (SEQ ID NO:23);
YSCHFGPLTWVCKP (aka EMP-19) (SEQ ID NO:24);
YSCHFGPLTWVC (aka EMP-21) (SEQ ID NO:25);
YSCHFGALTWVCK (aka EMP-22) (SEQ ID NO:26);
GGCRIGPITWVCGG (aka EMP-25) (SEQ ID NO:27);
HFGPLTWV (aka EMP-26) (SEQ ID NO:28);
GGTTSCHFGPLTWVCKPQGG (aka EMP-7) (SEQ ID NO:29);
GGTFSCHFGPLTWVCKPQGG (aka EMP-8) (SEQ ID NO:30);
GGTYSCHFGALTWVCKPQGG (aka EMP-10) (SEQ ID NO:31);
GGTYSCHFGPATWVCKPQGG (aka EMP-11) (SEQ ID NO:32);
GGTYSCHFGPLAWVCKPQGG (aka EMP-12) (SEQ ID NO:33);
GGTYSCHFGPLTAVCKPQGG (aka EMP-13) (SEQ ID NO:34);
GGTYSCHFGPLTFVCKPQGG (aka EMP-14) (SEQ ID NO:35);
GGTYSCHFGPLTWVCKAQGG (aka EMP-15) (SEQ ID NO:36);
GGTXSCHFGPLTWVCKPQGG (aka EMP-28, X = D-Tyr) (SEQ ID NO:37);
GGTXSCHFGPLTWVCKPQGG (aka EMP-29, X= *p*-$NO_2$-Phe) (SEQ ID NO:38);
GGTXSCHFGPLTWVCKPQGG (aka EMP-30, X = *p*-$NH_2$-Phe) (SEQ ID NO:39);
GGTXSCHFGPLTWVCKPQGG (aka EMP-31, X = *p*-F-Phe) (SEQ ID NO:40);
GGTXSCHFGPLTWVCKPQGG (aka EMP-32, X = *p*-I-Phe) (SEQ ID NO:41);
GGTXSCHFGPLTWVCKPQGG (aka EMP-33, X = 3,5-dibromo-Tyr) (SEQ ID NO:42);
Ac-GGTYSCHFGPLTWVCKPQGG (aka EMP-34) (SEQ ID NO:43);
GGLYACHMGPMTWVCQPLGG (aka EMP-35) (SEQ ID NO:44);
LGRKYSCHFGPLTWVCQPAKKD (aka EMP-37) (SEQ ID NO:45); and
GGTYSEHFGPLTWVKKPQGG (aka EMP-39) (SEQ ID NO:46).

15. (Original) The method of claim 14 wherein each of said monomeric peptides is independently selected from:
GGTYSCHFGPLTWVCKPQGG (aka EMP-1) (SEQ ID NO:8);

| | |
|---|---|
| GGTASCHFGPLTWVCKPQGG | (aka EMP-6) (SEQ ID NO:19); |
| GGTYSCHFAPLTWVCKPQGG | (aka EMP-9) (SEQ ID NO:20); and |
| YCHFGPLTWVC | (aka EMP-23) (SEQ ID NO:17). |

16. (Original) The method of claim 1 wherein said peptide is a dimer formed by a polyethylene glycol linker through a covalent bond.

17. (Original) The method of claim 16 wherein each monomeric peptides of said dimer are covalently bound N-terminus to N-terminus.

18. (Original) The method of claim 16 wherein each monomeric peptides of said dimer are covalently bound N-terminus to C-terminus.

19. (Original) The method of claim 1 wherein said monomeric peptides are dimerized on activated benodiazepins, oxazalones, azalactones, aminimides or diketopiperazine.

20. (Original) The method of claim 19 wherein said monomeric peptides are covalently bound N-terminus to N-terminus.

21. (Original) The method of claim 19 wherein said monomeric peptides are covalently bound N-terminus to C-terminus.

22. (Currently amended) The <u>method</u> ~~peptide~~ of claim 2, which comprises least one peptide dimer.

Claims 23-37: Canceled.